

**U. S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT**

I. HEADING

Date: April 13, 2000

Subject: Monroe Township Groundwater Contamination Site, Williamstown,
Gloucester County, New Jersey

From: Chaitanya Agnihotri, On-Scene Coordinator *CS Agnihotri*
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START	

POLREP NO.: 4 (Covers period from 01/29/00 to 03/31/00)

II. BACKGROUND

Site No.:	MQ
Delivery Order Number:	003 (ERRS Contract No. 68-S2-99-07)
Response Authority:	CERCLA
NPL Status:	Non-NPL
CERCLIS Number:	NJD98079699
Action Memo Status:	Action Memo approved December 6, 1999
Start Date:	September 21, 1999
Demobilization Date:	
Completion Date:	

III. RESPONSE INFORMATION

A. Incident Category

CERCLA incident category: Area-Wide Groundwater Contamination

B. Site Description

1. Site Location

The Site is located in the town of Williamstown, in the Township of Monroe, and consists of properties which use private wells as a source of potable water. The affected properties are located in three areas identified as the Winslow Road Area (including properties on Winslow Road and Maple Street); the Tuckahoe Road Area (consisting of properties on Tuckahoe Road, Sykes Lane and Glassboro Road) and the Black Horse Pike Area (including properties on Black Horse Pike).

2. Description of Threat

EPA became aware of groundwater contamination of private wells in Monroe Township while evaluating groundwater contamination associated with the Township's municipal supply wells. During EPA's evaluation of these municipal wells, the Agency obtained groundwater sampling data from the Gloucester County Health Department (GCHD), which indicated that certain private wells in the Township were contaminated with PCE. In addition, based on discussions with the New Jersey Department of Environmental Protection (NJDEP) and the U.S. Geological Survey (USGS), EPA became aware of groundwater contamination problems in the Township that were associated with Mercury.

C. Preliminary Assessment/Site Inspection Results

In cooperation with both the NJDEP and the GCHD, EPA selected three areas of Monroe in which to perform tap water sampling of private wells. This sampling was performed in order to assess whether the site could be eligible for a removal action, and to determine whether the Site should be proposed for inclusion on the National Priorities List (NPL). These areas were determined based on the locations of previously known elevated concentrations of PCE, and included properties in the areas of the Black Horse Pike, Winslow Road, and the area located in the vicinity of the intersection of Tuckahoe Road with Glassboro Road. The tap water sampling event was performed in July 1999, with approximately 100 homes being sampled. Of these 100 homes, it was found that 29 properties exceeded the federal maximum contaminant levels (MCLs) and removal action levels (RALs) for PCE, Benzene, Mercury, Thallium, Copper, and Lead.

IV. RESPONSE INFORMATION

A. Situation

1. Current Situation

As described above, EPA determined that there were 29 properties at which the tap water exceeded the RALs and MCLs for PCE, Benzene, Mercury, Thallium, Copper, and Lead. A summary of these exceedances is provided in the following table:

Monroe Township Groundwater Contamination Site

MAXIMUM CONCENTRATIONS OF CONTAMINANTS FOUND IN RESIDENTIAL WELLS (ppb)		EPA RAL (ppb)	EPA MCL (ppb)
PCE	1,500	70	5
Benzene	470	100	5
Mercury	19.9	10	2
Copper	3,260	1,300	TT*
Lead	62.6	30	TT*
Thallium	4.0	2	2

* TT - Treatment Technique, as per the Safe Drinking Water Act.

2. Removal Actions to Date

EPA has continued providing bottled water to the homeowners of the following list of impacted homes which have lead contamination:

739 Glassboro Road
969 Skyes Lane
1132 Tuckahoe Road
430 Winslow Road
465 Winslow Road
3331 South Black Horse Pike (a POET system is currently treating the mercury)

On March 20 and 21, 2000, EPA's ERRS Contractor (WRSE&I) collected samples from the 15 residences which had POET treatment systems installed in November or December 1999. These samples will be analyzed for PCE, mercury, and/or benzene.

The week of January 10, 2000, EPA and the Superfund Technical Assessment and Response Team (START) contractor collected additional samples from 87 residences. On March 15, 2000, EPA received the validated data from this sampling event. The following is a list of the residences which contained contamination of mercury, cadmium, thallium, and/or PCE above the acceptable EPA drinking water guidelines:

2745 South Black Horse Pike	mercury - 7.6 ug/L
2898 South Black Horse Pike	cadmium - 6.6 ug/L
2924 South Black Horse Pike	mercury - 17.9 ug/L
3194 South Black Horse Pike	mercury - 9.3 J ug/L
	PCE - 130 ug/L
2833 South Black Horse Pike	mercury - 8.5 ug/L
2779 South Black Horse Pike	mercury - 15.8 ug/L
125 Concord Drive	thallium - 5 B ug/L
171 Sikorski Road	mercury - 23.8 ug/L

These residences were notified by EPA about the contamination in their drinking water, and bottled water was delivered to them within a week. On Tuesday March 21, 2000, EPA's Emergency Rapid Response Services (ERRS) contractor (WRSI&E) obtained the services of Shockey's Water Treatment System Company to install point of entry treatment systems (POETs) (consisting of pH adjustment and a KDF-55 unit) at the three of the residences with only mercury contamination (these were 2745 South Black Horse Pike, 2924 South Black Horse Pike, and 171 Sikorski Road).

The residence at 3194 South Black Horse Pike consists of 6 residences, so a larger POET treatment system had to be designed to be able to treat the additional volume of water consumed at this property. This system will be installed in early April 2000.

The residences with cadmium (2898 South Black horse Pike) and thallium (125 Concord Drive) contamination were resampled in March 21, and March 24, 2000, respectively, to confirm the presence of these contaminants.

The following is a list of the residences which contained contamination of lead above the acceptable EPA drinking water guidelines:

739 Glassboro Road (sampled to reconfirm lead contamination)	
First draw sample	lead - 47.2 ug/L
After purging	lead - 119 ug/L
2712 South Black Horse Pike	lead - 25.5 ug/L
3358 South Black Horse Pike	lead - 19.4 ug/L
3497 South Black Horse Pike	lead - 43.1 ug/L
517 Roun Avenue	lead - 45.7 ug/L

1309 Corkery Lane	lead - 25.3 ug/L
1322 Corkery Lane	lead - 52.7 ug/L
1373 Corkery Lane	lead - 105 ug/L
661 New Street	lead - 18.6 ug/L
1327 Corkery Lane	lead - 15.8 ug/L

These residences were also notified, and they will be provided with bottled water until EPA completes additional testing to verify the source of the lead.

On March 24, 2000, WRSI&E collected samples from the three residence which had POET treatment systems installed on March 21, 2000.

The data from the January 2000 sampling event was reviewed, and letters were submitted to each homeowner with these results.

The week of March 27, 2000, EPA and START personnel sampled the following residences which have lead contamination to determine if the lead is coming from the piping system:

465 Winslow Road	2 water samples and a metal filing sample of the tank
969 Sykes Lane	2 water samples. No metal filing sample was collected
3331 SBHP	2 water samples and a metal filing sample of the tank
430 Winslow Road	2 water samples and a metal filing sample of the tank
1132 Tuckahoe Road	2 water samples and a solder joint filing sample and metals filing sample of the tank
1309 Corkery Lane	2 water samples and a metal filing sample of the tank

The above samples will be analyzed by Rutgers University for lead speciation analysis to verify if the lead in the water samples came from the pressure tank.

The week of March 27, 2000, the following residences were resampled for mercury:

3134 South Black Horse Pike
3154 South Balck Horse Pike
3799 South Black Horse Pike

The week of March 27, 2000, the following residence was sampled for TAL metals and VOCs:

1108 Tuckahoe Road

The week of March 27, 2000, the following residences were also sampled for TAL metals:

3331 South Black Horse Pike
430 Winslow Road

3. Enforcement

No Federal enforcement action is in progress at this time. Should a responsible party or parties be identified and be willing to undertake a timely and appropriate removal action, then EPA will evaluate its options with regard to enforcement.

B. Planned Removal Activities

The planned removal activities consist of ensuring that the POET treatment systems are operating properly. EPA will conduct quarterly sampling activities to verify the proper operation of the POET treatment systems and that the treatment criteria for the contaminants of concern are in compliance.

Also, bottled water will continue to be provided to properties where the MCLs and RALs for lead are exceeded, until such time that EPA can determine the sources of this contamination.

Additionally, in April 2000, the two-week samples will be collected by the ERRS Contractor (WRSI&E) from the three POET systems installed on March 21, 2000 for treating mercury. The additional POET system for the residence at 3194 South Black Horse Pike will be installed, and sampled after approximately one day and two weeks.

September 2000 sampling will be completed. This sampling will be completed at the 19 residences where point of entry treatment systems (POETS) were installed. This sampling is being completed to verify breakthrough is not occurring through the KDF-55 units or GAC units. If there is breakthrough, the KDF-55 or GAC units will be changed out with new treatment media. The systems will be monitored and maintained, including periodic sampling of the water to assure proper functioning.

The data received from additional sampling events will be reviewed and submitted to the homeowners. Through the use of START, EPA will also be performing follow-up sampling of some of the residences previously sampled.

C. Next Steps

The next activities include the 2-week sampling of the water being treated at the three residences which had POET treatment systems installed on March 21, 2000. An additional POET system will be installed at 3194 South Black Horse Pike, 2833 South Black Horse Pike, and 2779 South Black Horse Pike; and 1-day and 2-week samples will be collected. These two activities will occur in early to mid April 2000. The OSC and the ERRS contractor will mobilize to the site to collect the samples with START personnel monitoring the sampling event.

D. Key Issues

There were no key issues during the reporting period covered by this Pollution Report.

V. COST INFORMATION (to 03/31/00)

	AMOUNT BUDGETED	COSTS TO DATE (rounded)	AMOUNT REMAINING
ERRS costs	\$ 165,000	\$ 50,000	\$115,000
START costs	\$ 12,500	\$ 12,500	\$
START contingency	\$ 35,500	\$ 3,000	\$ 32,500
EPA costs	\$ 34,000	\$ 17,000	\$17,000
Total	\$ 247,000	\$ 82,500	\$ 164,500

The above accounting of expenditures is an estimate based on figures known to the OSCs at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI. DISPOSAL OF WASTES

This section is not applicable for the period addressed by this Pollution Report.